

What is claimed is:

1. A laminated polymer composite material comprising, a base structural member having at least one major surface and an overlay layer of polymer linked to at least a portion of said at least one major surface of the structural member, wherein the polymer is any polymer which can be thermally activated to obtain chemical and/or physical links with the structural member.
2. The laminated material of claim 1, wherein the structural member is of a material compatible or miscible with the material of the polymer layer.
3. The laminated material of claim 2, wherein the structural member is at least partially made of the same material as the polymer layer.
4. The laminated material of claim 3, wherein the polymer is a thermoplastic polymer.
5. The laminated material of claim 1, wherein a layer of polymer is fusion bonded to one major surface of the structural member.
6. The laminated material of claim 5, wherein an additional layer of polymer is fusion bonded to another major surface of the structural member, located on the opposite side of the structural member.
7. The laminated material of claim 1, wherein the structural member is a solid body.
8. The laminated material of claim 6, wherein the structural member has an internal hollow profile.
9. The laminated material of claim 8, wherein the thermoplastic polymer is reinforced with a filler or fibres.

10. The laminated material of claim 9, wherein the polymer is reinforced with wood fibres.
11. The laminated material of claim 10, wherein the structural member is made of a fibre-reinforced thermoplastic polymer.
12. The laminated material of claim 11, wherein the polymer overlay is in the form of a fibre-reinforced fabric.
13. The laminated material of claim 12, wherein the hollow structural profile of the structural member is in the form of a series of channels of a cross-sectional shape selected from the group consisting of square, triangular, circular and L-shaped.
14. The laminated material of claim 13, wherein the base structural member material is polypropylene reinforced with 30-60%/w of wood fibres, and wherein the polymer overlay layer material is fibre reinforced polypropylene fabric.
15. A process to produce a laminated polymer composite material as defined in claim 1, comprising the steps of:
- (a) heating at least a portion of at least one major surface of a base structural member,
 - (b) bringing at least one overlay layer of polymer material into contact with said at least one major surface of the structural member, and
 - (c) applying pressure to link the base structural member to the polymer layer.
16. The process of claim 15, wherein the process is a continuous process and the structural member and the polymer layers are in the form of strips of materials.

17. The process of claim 15, wherein the process is a batch process and the structural member and the polymer layers are in the form of sheets of materials.

18. An apparatus to produce a laminated polymer composite material as defined in claim 1 comprising:

heating means for heating at least a portion of at least one major surface of a structural base member, means for bringing a layer of polymer into contact with said at least one major surface of the structural member, and press means for applying pressure to link the structural member to the layer of polymer material.

19. The apparatus of claim 18, wherein the press means comprises a combination of mechanical guides and rollers applying pressure by sandwiching the layer of polymer and the internal structural member.

20. The apparatus of claim 18, wherein the press means is a roll-forming, compression molding or thermoforming system.